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**Business dynamics as the source of  
counterurbanisation:  
An empirical analysis of Turkey**

**Research Memorandum 2011-21**

**Aliye Ahu Gülümser  
Tüzin Baycan-Levent  
Peter Nijkamp**

## **Business dynamics as the source of counterurbanisation: an empirical analysis of Turkey**

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**Abstract:** Turkey is facing a slight but remarkable reversal in population flows between settlements, a movement known as ‘counterurbanisation’. The aim of this paper is to investigate the new patterns of population flows linked to changes in employment. To explore these patterns, the paper focuses on the causality linkages between urban-rural migration and rural employment, with a special focus on entrepreneurship, at the NUTS II level. Data used in this study are obtained from the Turkish Statistical Institute. To determine the link between counterurbanisation and entrepreneurship, a multivariate statistical technique, viz. linear regression analysis, was used. This paper is the first attempt to explore the new trends in migration and employment in Turkey while offering a contemporary context for the different patterns of causal relations between counterurbanisation and entrepreneurship. The results suggest that, in Turkey, the major motivation still remains the pursuit of employment.

**Keyword:** Turkey, migration, counterurbanisation, entrepreneurship, employment, linear regression

## **1 Settlements in transition: individual motives and economic shifts**

Human settlements have never had a static character but have always been in a state of flux (Nijkamp, 1978). This dynamic pattern depends intrinsically on the dynamics of the purposive movements of individuals. Contemporary shifts in both the economic activities and the population have had profound consequences for spatial re-organisation. Today, urban and economic systems are in transition, and now also cover small and medium-sized towns (van Leeuwen, 2008). Starting from the period of industrialisation until today's knowledge-based era, settlements have experienced three main spatial structural transformations due to population movement and changes in economic activities.

Van den Berg and Klaasen (1987) have summarised these transformations in a staged model of urban development and have suggested four stages in terms of the population movements and the agglomerations. These four stages are urbanisation, suburbanisation, disurbanisation, and reurbanisation. Apart from the disurbanisation stage, the other three stages have been the subject of urban development studies while disurbanisation also covers also counterurbanisation in the literature. Counterurbanisation is a newly developed concept. In addition, reurbanisation is no different from the urbanisation stage. Therefore, the spatial transformations, which have led urban borders to be extended can be cited as urbanisation, suburbanisation and counterurbanisation.

Urbanisation as a major shift from less developed areas to developed areas first occurred in the UK around 1850, and later on all around the world (Lewis, 1998; Lucas, 2007). This was the result of the mainstream population movement which is also called rural-urban migration in the literature. This population shift from less developed to more developed areas has been deeply investigated in social science history and has been the concern of policy makers for centuries due to its causation and consequences. Economic activities in urban settlements have called for a labour force. Due to the development of transportation systems, i.e. the railways during that time, the inhabitants of less developed areas, in the pursuit of employment, have responded to this call by leaving their settlements of origin (Harris and Todaro, 1970). In the beginning, urbanisation was the salvation for individual purposes and economic activities in urban areas. But the high concentration and immense growth of urban settlements necessitated spatial reorganisation due to the shortage of land in settlements. Therefore, today the negative impacts of urbanisation on both big and small towns can be evaluated as adverse. However, they cannot be evaluated purely as adverse because urbanisation also provides a good environment for agglomeration, innovation, and the advancement of technology (Nijkamp, 2009).

To ease the negative impacts of migration flows and to obtain urban quality of life, urban settlements are being reorganized by the generation of new settlements located close, and well-connected to urban areas (Woods, 2005). This is called 'suburbanisation' or 'decentralisation' in the literature. These new settlements were neither urban nor rural settlements and have become havens for urban movers who can afford transport expenses and housing. This can also be seen as the start of long distance commuting activities and did not go further than just being the extension of urban settlements. Therefore, social life and

employment remained the key concerns of rural settlements at the end of 19th century (Gülümser et al., 2008).

In addition, the realisation of economic activity shifts, i.e. the decentralisation of manufacturing and industry, started in the following years by the relocalisation of economic activities outside or in the periphery of urban settlements, depending on the movement of selective economic actors (Nijkamp, 1978; Halfacree, 2008). Although the mainstream movement and spatial organisation have continued with the suburbanisation, today an increase in the numbers of people moving from urban settlements to small towns much further away was first observed in the 1970s in the US (Beale, 1975; Berry, 1976). This new movement, called 'counterurbanisation', has been on the agenda of academics for three decades, and most of them think that there is no more to explore and the topic is exhausted (Halfacree, 2008). In contrast, the need for a clean break, the lack of a theoretical basis for the phenomenon (Dean et al., 1984), and its increasing trend mean that this phenomenon needs more investigation and clarity. Moreover, the diversity of individual purposes to move towards less developed areas has itself brought up a number of different types of counterurbanisation so that it is difficult to separate out one from the other (Halfacree, 2007; 2008). According to Champion (1989; 1998), there are two schools of thought in the literature. The first one agrees on two or three major explanations as the basis for understanding counterurbanisation (Geyer, 1996; Hugo and Smailes, 1985; Kontuly, 1998; Kontuly and Vogelsang, 1988; Moseley, 1984), while the second school of thought disagrees about this generalisation and prefers to explain the phenomenon by referring to the specificities of the location and the environment (Sant and Simons, 1993).

Besides the conceptual evaluation, there are also some critiques about the causation of the phenomenon, which assert that counterurbanisation is more than a new advanced phase of the decentralisation of metropolitan areas (Gordon, 1979; Coombes et al., 1989). Furthermore, from a theoretical perspective, counterurbanisation destroys the equilibrium. Although it is correlated to settlement size, this relation is not a positive correlation as it used to be in urbanisation or suburbanisation (Bar-Gal, 1982; Fielding, 1982). In addition, however, the empirical evidence shows the importance of quality of life for individuals, in regard to the correlation of the changes in economic activity and the increase in the number of counterurbanites need a special treatment. The population movements are usually the consequences of the pursuit of employment. But, this was not valid for counterurbanisation. To explain counterurbanisation as being associated with employment or economic shift has had a destructive effect on the theories. Therefore, researchers have focused on the association of the quality of life with the movement rather than the employment.

On the basis of the above-mentioned background, the aim of this study is to investigate different patterns of population flows through small towns linked to the changes in employment. To explore these differing patterns, the paper focuses on the causality linkages between counterurbanisation and employment changes, with a special focus on entrepreneurship in Turkey, at the NUTS II level. Turkey is facing a slight but remarkable reversal in population flows between settlements, a movement that can be called 'counterurbanisation'. This movement has attracted much attention in society at large and began as the pursuit of employment along with an affordable and sustainable life;

nevertheless, academic circles and the government, including local administrations, are still interested in the major type of migration. Contrary to the position in Turkey, the experiences of developed countries, especially in Europe, demonstrated that this counterurbanisation is linked to the entrepreneurship and to the pursuit of a new lifestyle. The data and information used in this study were obtained from the Turkish Statistical Institute (TURKSTAT). To determine the link and correlation between counterurbanisation and entrepreneurship, a multivariate statistical technique, viz. linear regression analysis, is used. The traditional literature pays more attention to the link between demography or quality of life and counterurbanisation. Unlike these attempts, in this study which offers an evaluation of the link between counterurbanisation and entrepreneurship on the basis of selected variables, viz. employment by sectors, migration by the size of settlement and by the place of residence, and entrepreneurship by sectors, we aim to contribute to the literature.

Section 2 summarizes briefly the counterurbanisation and employment changes from a theoretical perspective. Section 3 provides insights about the evolution of the settlements and the effects of the population movements from developed settlements to less developed settlements in Turkey. Section 4 explores the different patterns of migration and the employment changes, together with an explanation of the data, and then presents the results of the analysis. The study concludes by discussing the results of the evaluation, and making some suggestions for future research.

## **2 Counterurbanisation: theory and evidence**

The application of the mobility and spatial organisation theories, e.g. Zipf's Law (Zipf, 1949); Ravenstein's Law of Migration (Ravenstein, 1889); and Central Place Theory (Christaller, 1913; Lösch, 1954), to explain counterurbanisation did not succeed because of their focus on the urban nexus rather than the urban exposure, which includes the surrounding small towns. In addition, economic-based researches tried to explain counterurbanisation by the economic changes in urban areas, i.e. technology, modernisation, lower demand for labour, the land factor, state policy, decentralisation, and even by economic shifts (Fielding, 1982). But they underestimated the concept again because they took urban areas to be the core city without its surroundings.

The first decade of counterurbanisation studies were no more than empirical studies which were lacking a theoretical underpinning and sometimes used speculative causal factors or imprecise specifications or a broader approach to counterurbanisation (Dean et al., 1984). Starting with Fielding (1982), the search for a more technical and theoretical approach to counterurbanisation again did not go beyond showing different dynamics of this movement from other types of migration. For instance, on the basis of counterurbanisation in Western Europe, Fielding (1982), discussing three different theories, viz. the counterurbanisation model; the neo-classical economic model; and the state-intervention model, showed the negative correlation between counterurbanisation and settlement size, while stressing the need to add economic activity production systems in the models. But his models were unclear and remained obscure. The concept stayed empirical rather than being theoretical. It is hence not easy to formulate a unified theory of counterurbanisation.

Population movement depends on the individual purposes and intentions. Thus, internal counter-urbanites tend to migrate predominantly in pursuit of housing and quality of life (Jones et al., 2003; Sofranko and Williams, 1980), while long-distance counter-urbanites' motivation is more employment oriented (Halfacree, 1994). Although their purposes are distinguished on the basis of their commuting distance, the empirical studies also demonstrated their positive impacts on the economic development in small towns, especially in terms of creating jobs by means of entrepreneurship (Bosworth, 2006; Stockdale and Findlay, 2008). Thus, the new counter-urbanites perceive small towns as a dynamic, expanding and entrepreneurial milieu in which to invest (Bryant, 1989; Stathopoulou et al., 2004).

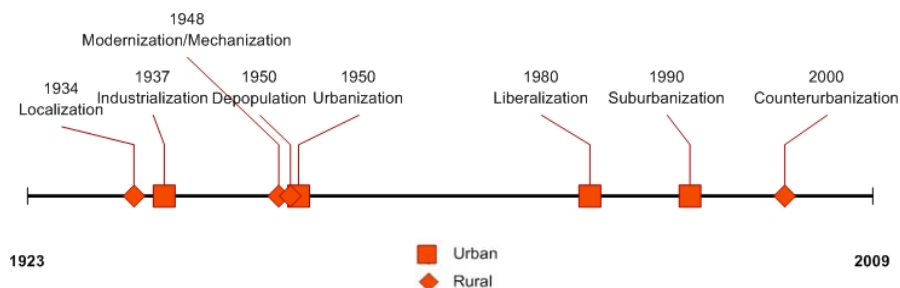
From an economic perspective, counterurbanisation is a form of salvation that triggers entrepreneurship, job opportunities and human capital accumulation while contributing to the economic development in small settlements (Bosworth, 2006; Stockdale and Findlay, 2008). Both practically and theoretically it is proven that endogenous economic development lies at the heart of converting local opportunities rather than bringing them in from outside (Petrin and Gannon, 1991). From an endogenous perspective, counterurbanisation and also the perception of newcomers has increased diversity and entrepreneurship in the small towns. Therefore, it is still unknown whether or not the entrepreneurship or a decrease in the traditional sectors is caused by counterurbanisation. Although the empirical evidence showed the causal relation between entrepreneurship, the theory of counterurbanisation cannot explain this relation, especially in terms of changes in employment structure. On this basis, the next section focuses on non-urban Turkey at the NUTS II level in order to explore the causality between different types of employment structures – especially entrepreneurship – and counterurbanisation.

### **3 Settlements in transition: structural changes in Turkey**

Starting from the establishment of the Republic, Turkey has experienced several spatial reorganisations. Concerning the big cities, this reorganisation has had four milestones, viz. industrialisation; urbanisation; liberalisation and suburbanisation, which triggered the reorganisation of small and medium-sized towns that then experienced localisation; modernisation; depopulation; and counterurbanisation (Figure 1). Consequently, these spatial re-organisations caused structural changes in the settlements in the form of demographic and economic changes.

The inherited problems from the Ottoman Empire and the Great Depression in 1929 led the Turkish government to follow statist policies, and the 1<sup>st</sup> Industry Plan was formulated in 1934 with the help of the Former Soviet Union. As a result, industrialisation spread out all over the country in 1937 (Büyükdagli, 1998), and to this day has remained the main target of Turkey's agenda. In the following years, although Turkey was not involved in World War II, the country was affected because the young men were called up for military service from the agricultural land, and hence depopulation started in small towns. The war, the decrease in the population of less developed areas, and the multi-party period in 1945 led Turkey to receive external aid (Yeni and Dülekoğlu, 2003; Oran, 2003, p.485). Thus, modernisation and

mechanisation in the traditional production processes began in the 1950s with Marshall aid (Anonymous, 2003). Thus, the modernisation of the sole and dominant traditional activity – agriculture – gave impetus to the mainstream population movement in Turkey (Dag, 2007).



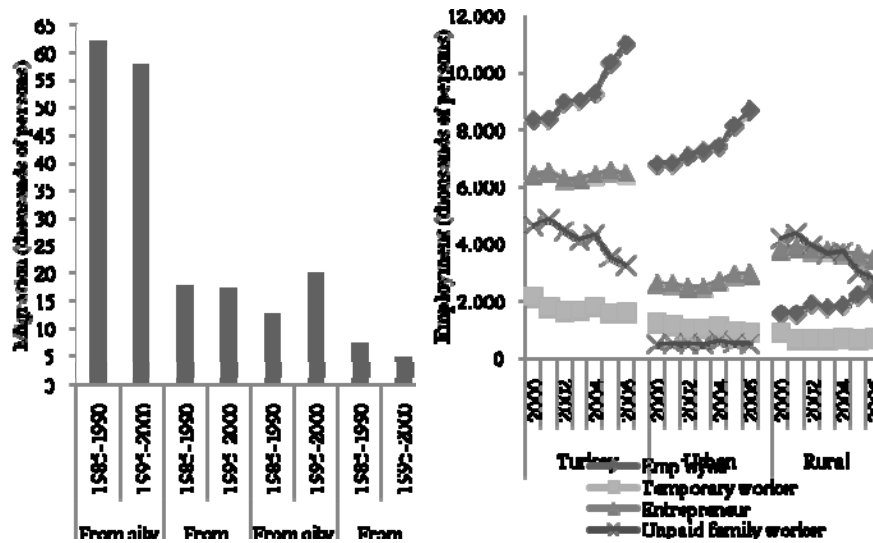
**Figure 1** Milestones of the structural changes in Turkey

The mainstream population movement in Turkey is the movement from small towns to big cities. The dynamics and motivations of this movement are mainly the inequality of income distribution and the disparities among settlements. This migration is not only a spatial-mobility but also a socio-economic phenomenon. The destination settlement faces a new period because of the growth of entrepreneurship, and urban systems, life and the cultural structure are experiencing considerable pressure while the origin settlement is losing its active population, its minimum economy, potential demand for the local market, and especially the possible innovative and entrepreneurial spirit of youth and, cannot break the vicious cycle of underdevelopment (Dag, 2007).

Although Turkey is still urbanising at an increasing pace, the remarkable increase in population flows from cities to small settlements has attracted much attention (Figure 2). This flow is not the dominant flow, but counterurbanisation nevertheless has the power to change the socio-economic structure of small towns which immediately react to the changes. However, it has not yet been thoroughly investigated whether this movement is counterurbanisation or not. Thus, the aim of this study is to explore – if this actually is a counterurbanisation – the causality relations with the employment structure of relatively small settlements.

At a glance, however, most of migration in Turkey is still between big cities: the migration flow from big cities to small towns doubled between 1995 and 2000, and became the second mainstream population movement (Figure 2). This remarkable increase has attracted much attention and calls for an in-depth analysis. Apart from this observed increasing trend in the movement from cities to small towns, there was a change in the non-urban employment reflected in a decrease in unpaid workers and an increase in entrepreneurship (Figure 2). It must be kept in mind that the dominant sector in most of the small towns in Turkey is still the agriculture in which an unregistered labour force, i.e. the women and children of the households are working and are included in unpaid workers in the Census.





**Figure 2** The demographic and economic structural changes

In addition to the migration flows, there has been a clear increase in the number of entrepreneurs in recent years. In order to see if there is a causal relations between these increases in both employment and migration, in the following sections we evaluate them by means of a regression analysis. The data and information used in the analysis is explained in the next section.

## 4 The causation of counterurbanisation in Turkey

### 4.1 The patterns of counterurbanisation and entrepreneurship in Turkey

The diversity and heterogeneity in the lands of the Turkish Republic is very well known. These divergences reflect the different patterns of socio-economic characteristics of each region. Because of the lack of data and in order to be more accurate, this wide diversity has led us to apply our analysis at the NUTS II Level. In Turkey, there are 26 NUTS II regions composed of 81 provinces, 996 districts, and approximately 35,000 small towns. Data concerning the movement of people is collected by TURKSTAT in two ways, first population flows between regions depending on the place of residence, and, second, movements inside the province depending on the type of settlements.

In this study, to investigate the causality linkages between employment changes and counterurbanisation as the reverse movement of people, data and information has been obtained from two data sources of the Turkish Statistical Institute (TURKSTAT), viz. the 2000 Population Census (PC) and the 2006 Labour Force Survey (LFS) at NUTS II level. The population of the 26 regions, the migration towards the small towns in the region and between the regions are retrieved from the 2000 Population Census, while the employment

variables are retrieved from the Labour Force Surveys 2006 for three years: 2004, 2005, and 2006 (Table 1). Thus, we calculated our data set on the basis of these variables, as explained in Table 1.

**Table 1** Variables used in the analysis

Name	Explanation	Source
Population	Population	PC 2000
Big to small	Net in-migration from big city to small town between regions by place of residence	PC 2000
Less developed	Net in-migration to less developed areas inside the regions	PC 2000
Employed	Increase in the number of employed population between the years 2004 and 2006	LFS 2006
Entrepreneur	Increase in the number of entrepreneurs between the years 2004 and 2006	LFS 2006
Unpaid worker	Increase in the number of unpaid workers between the years 2004 and 2006	LFS 2006
Agriculture	Increase in the number employed in agriculture between the years 2004 and 2006	LFS 2006
Industry	Increase in the number employed in industry between the years 2004 and 2006	LFS 2006
Trade	Increase in the number employed in trade between the years 2004 and 2006	LFS 2006
Service	Increase in the number employed in services between the years 2004 and 2006	LFS 2006
Entreagriculture	Increase in the number of entrepreneurs in agriculture between the years 2004 and 2006	LFS 2006
Entreindustry	Increase in the number of entrepreneurs in industry between the years 2004 and 2006	LFS 2006
Entretrade	Increase in the number of entrepreneurs in trade between the years 2004 and 2006	LFS 2006
Entreservice	Increase in the number of entrepreneurs in services between the years 2004 and 2006	LFS 2006

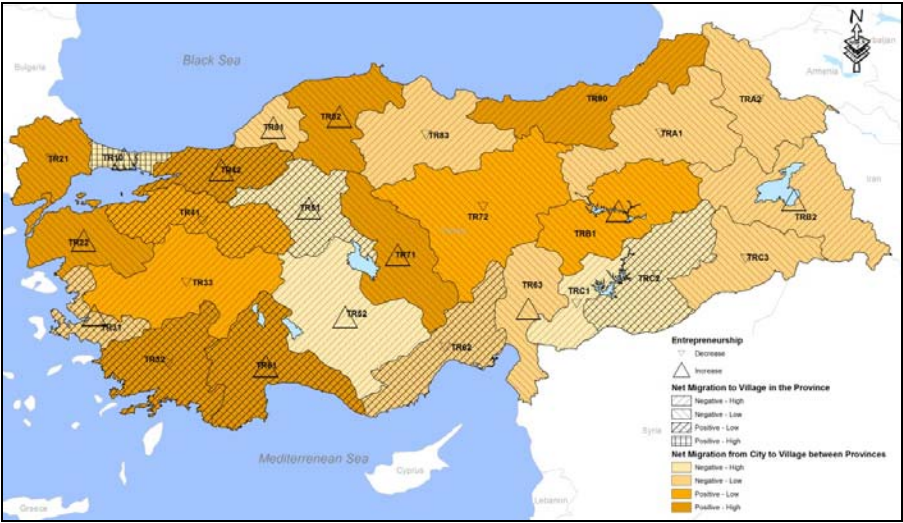
In the country, regions have different push and pull factors which create different patterns of population flows. There are four patterns of migration to small towns in Turkey at the NUTS II level (Figure 3 and Table 2). The patterns show that in some southern regions, a reverse flow from the city can be observed. Thus, we can conclude that the small towns in major city regions are urbanising at an increasing pace, i.e. TR10: Istanbul, TR51: Izmir, and TR31: Ankara.

Moreover, when the changes in entrepreneurship are evaluated, it is evident that Turkey is becoming an entrepreneurially-oriented country. In other words, an increase in entrepreneurship can be observed in the majority of regions (Figure 3 and Table 2). Here, we evaluate entrepreneurship as the total number of self-employed and employers, as there is a lack of entrepreneurship-specific data in Turkey. When a cross-tabulation is formulated, eight different patterns among the 26 regions can be observed. Although in terms of population movement the patterns can be explained geographically, it is not easy to show them in terms of entrepreneurship.

Two NUTS II regions, TR42: Antalya and TR61: Kocaeli have positive signs in terms of changes and increase in entrepreneurship. This picture demonstrates both the disparity between regions in Turkey and the attractiveness of some of them. Although the Eastern regions seem less attractive for internal migration, there is, however, an increase in entrepreneurship, and in those regions a movement towards small towns inside the provinces can be only seen in TRC2: Sanliurfa. On the other hand, the TR10 region, which covers

Istanbul, has experienced a movement inside the region towards small towns. However, the movement to the region is to the core city not to the small towns.

**Figure 3** The patterns of counterurbanisation and entrepreneurship



**Table 2** Four different patterns of movement and entrepreneurship

Entrepreneurship Decreased	Entrepreneurship Increased
1 / –within region; –between regions	
TRB2 Van, Mus, Bitlis, Hakkari	TRC3 Mardin, Batman, sirnak, Siirt
TR81 Zonguldak, Karabük, Bartin	TRA2 Agri, Kars, Iğdır, Ardahan
TR63 Hatay, Kahramanmaraş, Osmaniye	TRA1 Erzurum, Erzincan, Bayburt
	TRC1 Gaziantep, Adiyaman, Kilis
	TR83 Samsun, Tokat, Çorum, Amasya
	TR52 Konya, Karaman
2 / –within region; +between regions	
TR21 Tekirdag, Edirne, Kırklareli	TR22 Balıkesir, Çanakkale
TR33 Manisa, Afyon, Kütahya, Uşak	TRB1 Malatya, Elazığ, Bingöl, Tunceli
TR72 Kayseri, Sivas, Yozgat	TR82 Kastamonu, Çankırı, Sinop
TR90 Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane	TR71 Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir
3/+within region; –between regions	
TRC2 Sanliurfa, Diyarbakir	TR10 Istanbul
TR62 Adana, Mersin	TR51 Ankara
	TR31 Izmir
4 / +within region; +between regions	
TR41 Bursa, Eskisehir, Bilecik	TR61 Antalya, Isparta, Burdur
TR32 Aydın, Denizli, Mugla	TR42 Kocaeli, Sakarya, Düzce, Bolu, Yalova

The accumulation of people depends, of course, on the motivation of people. This motivation can be related to both economic and quality-of-life concerns. Although there are data on the motivations of people, such data cannot be crossed with the types of migrations. Therefore, we are not able to use the data on motivations. But, the 2000 Census (TURKSTAT, 2000) shows that the motivation of people is primarily economic-based such as promotion to a new place, while the second main motivation is family reunification when the wife follows her husband. Therefore, we can expect a casual relation between employment changes and migration.

To achieve our aim, one of the well-known statistical tools for the investigation of relationships between variables, i.e. regression analysis, is used in this study. The regression technique has a long been used in the field of economics. The data collection of TURKSTAT and the difficulty to obtain micro data from the institute has prevented us from formulating a model to make a better investigation on account of the diversity of the phenomenon. Therefore, we were not able to investigate the mutual causality, but instead we simply investigated the employment changes as the causation of counterurbanisation. Section 4.3 investigates this causation by means of linear regression models.

#### 4.2 *The employment-related causation of the counterurbanisation in Turkey*

In this study, as we seek to find out the causality effects (if there are any) of migration on employment changes, we use a linear regression technique to model the causality pattern. The linear regression technique is used to model the value of a dependent scale variable based on its linear relationship to one or more predictors. First, we generated a model to investigate whether the value of migration can be explained by employment, particularly by entrepreneurship based on their linear relationship. Thus, our general model for the two types of measurement of migration is:

$$\text{Migration} = c + \text{Employment Changes} + \text{Population}$$

Both sub-models are statistically significant. In other words, the variation explained by the model is not due to chance (see Table 3). While the values of the multiple correlation coefficient (R) of each model indicate that there is a strong relationship between the dependent and independent variables.  $R^2$ , the coefficient of determination, which is the squared value of the multiple correlation coefficient, shows that about half of the variation in time is explained by the model. The values of R and  $R^2$  show that the relation to explain migration by changes in employment is rather strong.

Other tools to show the validity of the causality model are the histogram, scatter plot and a P-P plot of residuals. A residual is the difference between the observed and model-predicted values of the dependent variable. In other words, it is the observed value of the error term for that product. Thus, a histogram or P-P plot of the residuals helps to check the assumption of normality of the error term. The shape of the histogram should approximately follow the shape of the normal curve while the P-P plotted residuals should follow the 45-degree line. Among our models, the model of migration in the region to less developed areas is acceptably close to the normal curve, while the model of migration between regions from big cities to small towns is not very close to the normal distribution (Figure 3). But it should be kept in mind that neither the histogram nor the P-P plot indicates that the normality assumption is violated. The scatter plot shows a point far to the right of the others that is identified as an outlier. TR10: Istanbul is an outlier in each model.

Therefore, the statistically significant final equation can be generated. We have two final equations which explain the causality relation of migration with employment changes. The first final equation is related to migration from the city to small towns between regions. According to the results of the analysis the final model is:

$$\text{Big to small} = c + (-1.04 \text{ Population}) + (-13.9 \text{ Entrepreneur}) + (3.63 \text{ Entreindustry})$$

**Table 3** The results of the models

	<b>R</b>	<b>R<sup>2</sup></b>	<b>Adjusted R<sup>2</sup></b>	<b>Sig.</b>
<b>Model 1: Big to Small</b>	0.864	0.747	0.513	0.001
<b>Model 2: Developed to less developed</b>	0.95	0.903	0.814	0

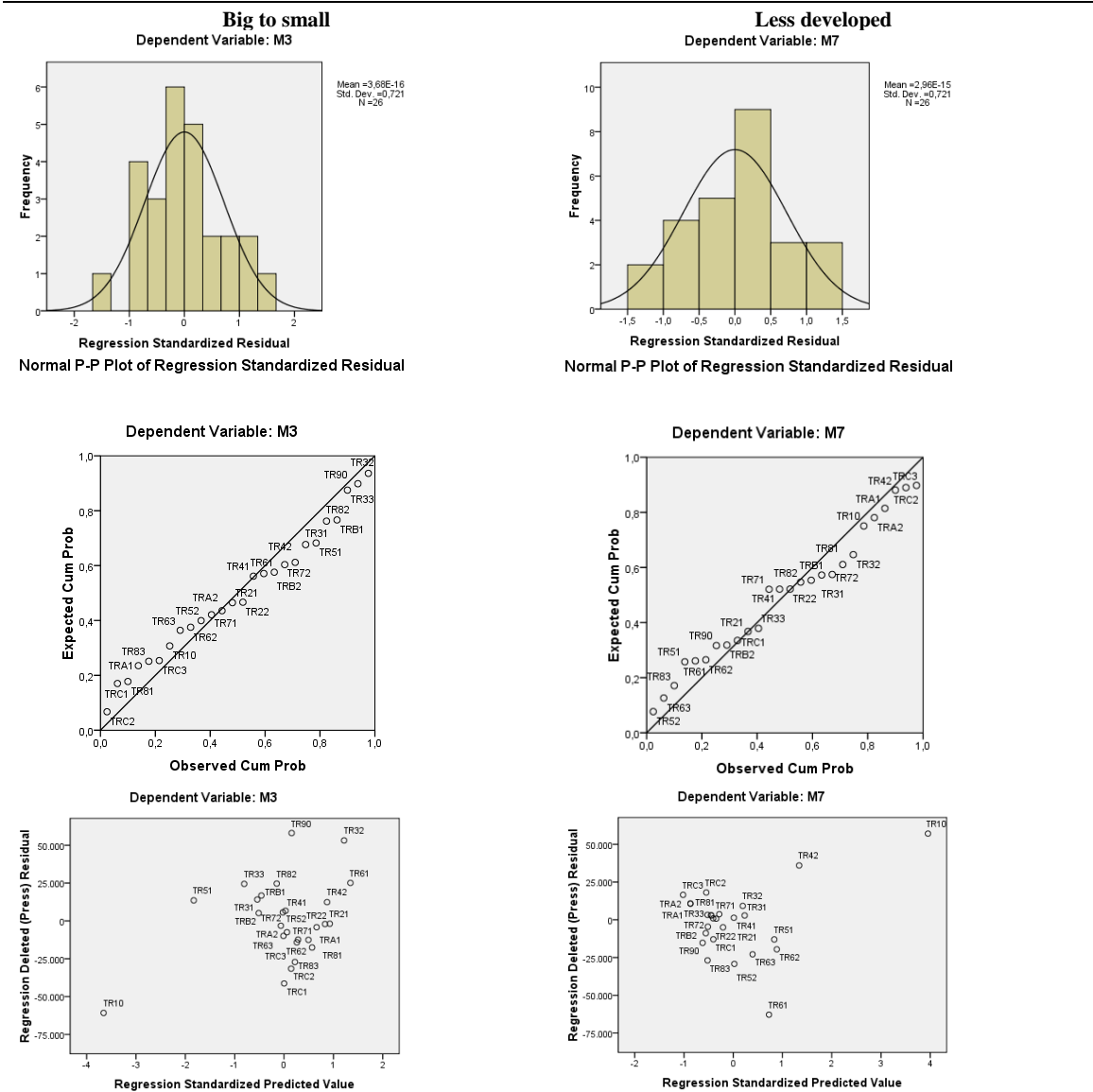
  

<b>COEFFICIENTS</b>						
	<b>Big to small</b>			<b>Developed to less developed</b>		
	<i>Coefficient</i> <i>STD</i>	<i>t</i>	<i>Sig.</i>	<i>Coefficient</i> <i>STD</i>	<i>t</i>	<i>Sig.</i>
Constant		2.00	0.07		-3.168	0.01
Population	-1.04	-2.10	0.06	0.376	1.228	0.24
Employed	-3.76	-0.60	0.56	-5.703	-1.467	0.17
Entrepreneur	-13.99	-1.75	0.10	-3.316	-0.671	0.51
Unpaid worker	-3.67	-0.61	0.55	-5.087	-1.369	0.19
Agriculture	4.51	0.54	0.60	7.309	1.416	0.18
Industry	1.38	0.42	0.68	2.630	1.296	0.22
Trade	2.15	0.83	0.42	2.951	1.845	0.09
Service	1.64	0.51	0.62	2.995	1.501	0.16
Entreagriculture	9.86	1.55	0.15	0.108	0.027	0.98
Entreindustry	3.63	1.84	0.09	0.407	0.333	0.74
Entretrade	3.01	1.34	0.20	-0.551	-0.397	0.70
Entreservice	3.54	1.48	0.16	0.074	0.050	0.96

The model shows that migration to the small towns of a region from cities in another region has a negative relation with the population. This result is the same as that of the earlier models related to counterurbanisation. According to the results, the relation with total entrepreneurship is negative, while the relation with the industrial and manufacturing entrepreneurship is positive. This situation shows that counterurbanisation is very much related to the decentralisation of industry and industrial investment. Thus, counterurbanisation does not stimulate local people to become or to continue to be entrepreneurs but rather creates employment for local people in industry.

The second equation which explores the relation between migration flows in the province through small towns is:

$$\text{Developed to Less Developed} = c + (2.95 \text{ Totaltrade})$$



**Figure 4** Plots of the residuals

The flow through small towns in the provinces is positively related to the employment in the trade sector. The result shows that counterurbanisation in the provinces creates a change in the production system, and thus increases the trade in the small towns. In other words, counterurbanisation contributes to the networks between small towns and cities, and thus creates production flows in both directions due to which a convergence can be seen. The

counterurbanisation in the province can be seen as a form of salvation for its urban population.

The results show that counterurbanisation is related to entrepreneurship by, on the one hand, increasing the economic diversity, and, on the other hand decreasing the agricultural entrepreneurship. Therefore, counterurbanisation calls for locality-specific policies and also an in-depth study of its consequences in order to obtain the sustainability of localities.

## **5 Retrospect and Prospect**

The counterurbanisation concept is not a clear and is perhaps a somewhat ambiguous concept. The difficulty to generalize the concept due to the diversity of motivations of movers and their impacts on the destination have prompted researchers to focus more on empirical evidence than on theoretical issues. The empirical studies and the attempts at theoretical descriptions have shown that counterurbanisation differs from the mainstream population movement in terms of its causality linkages with settlement size and employment structure, including the economic system. Although the linkage with settlement size is always negative, the linkage with employment, especially with entrepreneurship, is fuzzy according to the different empirical studies (see e.g. Bosworth, 2000; Stockdale and Findlay, 2005). Moreover, it is difficult to claim the counterurbanisation as either adverse or a salvation for settlements. Therefore, the aim of this study was to investigate the causality linkages between counterurbanisation and employment with a special focus on Turkey at the NUTS II level.

According to the data obtained from the 2000 Census, the remarkable increase in the population movement from developed to less developed settlements has become the second mainstream movement in Turkey. To identify the causes and effects of this new flow, the causality patterns of migration and employment – especially entrepreneurship – were investigated by linear regression analysis. To reach our aim, two general models were constructed related to migration to small towns and to entrepreneurship. Two statistically significant sub-models were employed depending on the two different measurements of counterurbanisation. According to the results of counterurbanisation between regions in Turkey, counterurbanisation contributes to the development of entrepreneurship in the industry sector while negatively affecting the overall entrepreneurial activity in small towns. Therefore, counterurbanisation has become adverse for small towns. Even though economic diversity is one of the main targets of the development of small towns, the local population who sell their agricultural land to the industrial companies have left their homelands and moved to cities in the hope of finding a better job and life (the Harris-Todaro phenomenon). In addition, the results suggest that the counterurbanisation in Turkey is no more than industrial decentralisation, and is negatively correlated with the settlement size.

The results of the second sub-model related to counterurbanisation in each individual province suggested that counterurbanisation contributes to the total trade activities in small towns. This shows that the networks and relations in the province are changing due to counterurbanisation. In other words, the increase in trade due to the counterurbanisation highlights the changes in urban and rural dependency and dichotomy. Therefore, counterurbanisation has brought small towns into the production system. In this case, it must



be kept in mind that the sustainability and continuity of the scarce goods in small towns, i.e. nature, traditions and locality features, depend on the involvement of locality in the traditional production system.

Although we accept that Turkey is experiencing counterurbanisation, the data used in this study reflects the situation that existed a decade ago. In addition, the lack of up-to-date data and the inaccurate type of data collection also limited us in investigating the continuity of this movement. There is no doubt that Turkey has faced counterurbanisation. The effects of this movement are adverse for the dominant entrepreneurial activity. This negative development is related to the policies focused on industry. The absence of localities as a priority on the policy agenda of Turkey, which generates generalized policies instead of priorities for the localities, makes it difficult to convert these policies into practice. In addition, counterurbanisation is also related to social science and there is a need for cross-data of migration and social characteristics of migrants in order to tackle the topic as a whole.

Small towns are very important for the sustainability of urban areas. As Harris and Todaro stated in 1970, the development of urban areas calls for the development of small towns. Therefore, on the basis of this study and early studies, in this respect, there are two future paths along which to continue this research. There is a need for a clean break with the current situation in order to identify whether this new population flow is a continuing process or not. Therefore, a general and theoretical background can be conducted for Turkey on the one hand, while on the other hand, the need to investigate in-depth and to understand the situation in the small towns of Turkey and of the newcomers and local people are be the research challenges for the future.

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